IN THE CLAIMS

Please amend the claims as follows:

1. (original) A fountain comprising:

a supply of water under pressure;

a primary fluidic diverter having an input for said supply, and first and second outputs diverging from said input, two control ports provided with control flow to direct input flow to one or other of said outputs; and

a vortex amplifier comprising a vortex chamber, a radial port, a vortex inducing port and an axial output port;

wherein one of said first and second primary diverter outputs is connected to said vortex inducing port and the other is connected to said radial port, said axial port leading to a nozzle whereby an alternating vortex spray or axial jet is produced.

2. (original) A fountain as claimed in claim 1, in which said control ports are interconnected by an inertia loop, whereby oscillations are induced in the control flow to switch flow alternately between said first and second outputs.

3. (previously presented) A fountain as claimed in claim 1, in which said first and second outputs of said diverter are vented to isolate each output from the input.

4. (original) A fountain as claimed in claim 1, in which said outputs have restrictors therein and include feed back loops into said control ports, whereby oscillations are induced in the control flow to switch flow alternately between said first and second outputs.

5. (previously presented) A fountain as claimed in claim 1, in which said diverter is cusped between said first and second outputs to increase stability of flow through said first and second outputs.

6. (previously presented) A fountain as claimed in claim 1, in which said vortex amplifier comprises an annular chamber formed by a tubular housing and central body, supply flow to the amplifier entering said annular chamber at one end, the other end of the annular chamber being terminated by a nozzle plate defining with said central body said vortex chamber, said housing having an opening forming said vortex inducing port.

7. (original) A fountain as claimed in claim 6, in which said vortex inducing port is a passage from a supply chamber outside said housing and arranged tangentially with respect to said vortex chamber.

8. (original) A fountain as claimed in claim 6, in which said vortex inducing port comprises a plurality of said openings in said housing, each opening provided with a vane to tangentially direct radial inflow from a supply chamber surrounding said housing.

9. (previously presented) A fountain as claimed in claim 1, in which said nozzle is interchangeable with different nozzles displaying one of various spray patterns when vortex spray issues therefrom.

10. (previously presented) A fountain as claimed in claim 1, in which a spray catcher is disposed beyond the nozzle to deflect vortex spray issuing from said nozzle, the catcher having an orifice to permit passage of said axial jet to flow unimpeded.

11. (original) A fountain as claimed in claim 10, in which the catcher is inverted so as to destroy entirely said vortex spray.

12. (previously presented) A fountain system incorporating a fountain as claimed in claim 1, in which two of said vortex amplifiers are provided in parallel, each with its own supply to its radial

port, each vortex inducing port being connected to one or other of said first and second outputs of the primary diverter.

13. (original) A fountain system as claimed in claim 12, in which said axial outputs of the two vortex amplifiers lead to further components of the system which are arranged to be controlled by greater or lesser flow rates that issue from said axial outputs of the vortex amplifiers depending on whether there is flow into said vortex inducing port.

14. (previously presented) A fountain system incorporating a fountain as claimed in claim 1, in which two of said primary diverters are provided whose first outputs are joined together and comprise the radial input for said vortex amplifier, and whose second outputs are connected to separate vortex inducing ports of said vortex amplifier, whereby several modes of operation of the vortex amplifier results.

15. (previously presented) A fountain system as claimed in claim 14 in which said control ports of each primary diverter are interconnected by an inertia loop, whereby oscillations are induced in the control flow to switch flow alternately between said first and second outputs, and in which said control loops are of different length.

16. (previously presented) A fountain system incorporating a fountain as claimed in claim 1, in which a self-oscillating vortex nozzle is provided, comprising a cylindrical vortex chamber having a central output nozzle and an input comprising a section of the cylindrical wall of the chamber to which an input chamber is connected, a narrowing of the input chamber being provided at the input section of the vortex chamber, whereby flow entering the vortex chamber oscillates between swirling entry and straight radial entry leading to oscillations in the output between a straight jet and a swirling spray.

17. (previously presented) A fountain system incorporating a fountain as claimed in claim 1, in which a wind detection and adjustment device is provided, comprising a catcher for water issuing from a fountain display and falling under no-wind conditions, and a wind control diverter having a supply input, first and second wind control outputs diverging from said supply input, two wind control ports to direct supply input flow to one or other of said outputs, wherein water caught by the catcher is supplied to one control port to direct supply input flow to said first wind control output, the other control port being supplied from a feedback loop from said first wind control output that switches supply input flow to said second wind control output when no water flows from said catcher.

18. (original) A fountain system as claimed in claim 17, in which said first wind control output is connected to the radial port of a fountain supply vortex amplifier to provide a strong flow therethrough, and said second wind control output is connected to a tangential port of a vortex amplifier to provide a weak flow therethrough, output from the fountain supply vortex amplifier supplying the fountain display.

19. (previously presented) A fountain system incorporating a fountain as claimed in claim 1, in which manual control is provided, comprising a manual diverter having a manual input, first and second manual outputs diverging from said manual input, first and second manual control ports to direct said input flow to one or other of said outputs, wherein each control port is supplied by a branch from said manual supply, each branch being controlled by a first restrictor and at least the first control port branch having a second restrictor, a selectively blockable vent being provided between said first and second restrictor whereby, when said vent is blocked, said restrictors are such that control flow is primarily through said first manual control port and, when said vent is not blocked, control flow is primarily through said second port.

20. (original) A fountain system as claimed in claim 19, in which both branches have a second restrictor, and both have a selectively blockable vent between their respective first and second restrictors.

21. (previously presented) A fountain system incorporating a fountain as claimed in claim 1, in which a pilot diverter is provided, comprising a pilot flow input, first and second pilot outputs diverging from said pilot input, two pilot control ports provided with control flow to direct pilot input flow to one or other of said pilot outputs, which pilot outputs comprise the control ports of said primary diverter.

22. (original) A fountain system as claimed in claim 21, in which said pilot diverter is in the form of a logic module receiving a plurality of inputs from different sources whereby the direction of switching of said primary diverter may be dependent on a plurality of factors controlled by said logic module.

23. (previously presented) A fountain system incorporating a fountain as claimed in claim 1, in which multiple logic diverters are provided connected in a logic circuit, wherein each logic diverter has a logic flow input, first and second logic outputs diverging from said logic input, two logic control ports provided with control flow to direct logic input flow to one or other of said logic outputs, which logic outputs supplies the control ports of any other logic diverter, any pilot diverter or said primary diverter.

24. (original) A fountain system as claimed in claim 23, comprising a plurality of diverters, some providing alternating jets directly, and others feeding vortex amplifiers providing alternating jets and sprays, each diverter being controlled by said logic module having a number of inputs, one of said inputs being connected to one output of a neighbouring diverter, and another of said inputs being connected to the other output of said neighbouring diverter or to one output of a different neighbouring diverter.

25. (original) A fountain system as claimed in claim 24, in which a neighbouring diverter for a diverter on one side of the fountain display comprises a diverter on the opposite side of the display, whereby the display is topologically on the surface of a sphere.

26. (original) A fountain system as claimed in claim 25, in which said diverters are arranged in a square formation and each diverter has eight neighbours, said logic module having four inputs on one side and four on the other.

27. (canceled)

28. (original) A wind detection device comprising a catcher for liquid issuing from a detecting jet and falling under no-wind conditions, an outflow from the catcher for liquid caught by the catcher, and means to detect liquid in the catcher.

29. (original) A wind detection device as claimed in claim 28, in which said means to detect comprises a pressure sensor sensitive to hydrostatic pressure of liquid in the catcher.

30. (original) A wind detection device as claimed in claim 28, in which said means to detect comprises a flow detector sensitive to outflow of liquid from the catcher.

31. (previously presented) A wind detection device as claimed in claim 28, in which the detecting jet is vertical.

32. (original) A wind detection device as claimed in claim 31, in which the jet is vertically upwards, from the centre of the catcher.

33. (previously presented) A wind detection device as claimed in claim 28, in which said means to detect is non-fluidic.

34. (canceled)

35. (original) A fountain display, comprising at least two display elements, each element being driven by at least one output of a diverter directly associated with each element and controlled by a logic module, each diverter comprising an input for a supply of liquid, and first and second outputs diverging from said input, and at least one control port selectively provided with control flow to direct input flow to one or other of said outputs, and each logic module having at least two inputs and at least one output connected to the control port of the diverter to provide said control port with said selective control flow, and wherein at least one output of the diverter of one element is connected to one input of the logic module of another element.

36. (original) A fountain display as claimed in claim 35, wherein each element has two modes of operation, one mode driven by one output of said associated diverter and the other mode being driven by the other output of said associated diverter, said connection to said input of the logic module of said another element being a branch of one of said outputs of said associated diverter.

37. (original) A fountain display as claimed in claim 36, in which said logic module comprises multiple logic diverters in a logic circuit, wherein each logic diverter has a logic flow input, first and second logic outputs diverging from said logic input, two logic control ports provided with control flow to direct logic input flow to one or other of said logic outputs, which logic outputs supply the control ports of any other logic diverter, or the, or one, output of the logic module.

38. (previously presented) A fountain display as claimed in claim 36, in which the display elements are in a formation in which each element is surrounded by N neighbouring ones of said elements and in which each logic module has N inputs, one from said branch of each neighbour.

39. (original) A fountain display as claimed in claim 38, in which the number N of neighbours and inputs is the same for each element, the display being arranged as a topological sphere.

40. (previously presented) A fountain display as claimed in claim 38, in which the formation is square, and N is eight.

41. (previously presented) A fountain display as claimed in claim 38, arranged to emulate a cellular automaton demonstrating the "Life" process of J H Conway.

42. (previously presented) A fountain display as claimed in claim 38, arranged to emulate a cellular automaton demonstrating the "rule 30" algorithm of S Wolfram.

43. (previously presented) A fountain display as claimed in claim 35 incorporating a wind detection device comprising: a catcher for liquid issuing from a detecting jet and falling under no-wind conditions; an outflow from the catcher for liquid caught by the catcher; and means to detect liquid in the catcher.

44. (currently amended) A fountain as claimed in claim 1, further comprising:

~~a supply of water under pressure;~~

~~a fluidic diverter having an input for said supply, first and second outputs diverging from said input, and two control ports provided with control flow to direct input flow to one or other of said outputs;~~

a control loop interconnecting said control ports to cause oscillation of said direction of the input flow; and

a tapping in said control loop, whereby said control loop may be supplied with water or drained of water to control the frequency of said oscillation.

45. (original) A fountain as claimed in claim 44, in which said tapping is a first tapping connected to said supply, a second bleed tapping being provided in the control loop between said first tapping and one control port, whereby said first tapping admits flow into the control loop,

said second tapping drains flow from said control loop, whereby switching of the diverter may be controlled by restricting said drainage.

46. (original) A fountain as claimed in claim 45, in which restrictors are provided around said second tapping to adjust relative flow in the control loop on either side of the second tapping, and into the bleed.

47. (previously presented) A fountain as claimed in claim 45, in which said diverter is arranged to be monostable to one of said output ports, temporary blocking or unblocking of said bleed tapping serving to switch flow to the other of said output ports.

48. (previously presented) A fountain as claimed in claim 45, in which a third bleed tapping is provided in the control loop on the other side of said first tapping remote from said second bleed tapping.

49. (previously presented) A fountain as claimed in claim 1, in which said nozzle opens into an annular diffuser to catch said vortex spray, but not said axial jet, said diffuser opening into an annular pressure plenum.

50. (original) A fountain as claimed in claim 49, in which said plenum is provided with discrete nozzle exits.

51. (canceled)

52. (withdrawn) A fountain display as claimed in claim 35, wherein one or more of said display elements comprises a fountain comprising:

a supply of water under pressure;

a primary fluidic diverter having an input for said supply, and first and second outputs

diverging from said input,

two control ports provided with control flow to direct input flow to one or other of said outputs; and

a vortex amplifier comprising a vortex chamber, a radial port, a vortex inducing port and an axial output port;

wherein one of said first and second primary diverter outputs is connected to said vortex inducing port and the other is connected to said radial port, said axial port leading to a nozzle whereby an alternating vortex spray or axial jet is produced.

53. (withdrawn) A fountain display as claimed in claim 52, in which said control ports are interconnected by an inertia loop, whereby oscillations are induced in the control flow to switch flow alternately between said first and second outputs.

54. (withdrawn) A fountain display as claimed in claim 52, wherein two of said vortex amplifiers are provided in parallel, each with its own supply to its radial port, each vortex inducing port being connected to one or other of said first and second outputs of the primary diverter.

55. (withdrawn) A fountain display as claimed in claim 52, wherein two of said primary diverters are provided whose first outputs are joined together and comprise the radial input for said vortex amplifier, and whose second outputs are connected to separate vortex inducing ports of said vortex amplifier, whereby several modes of operation of the vortex amplifier results.